AMENDMENTS TO THE CLAIMS

Claim 1 (Currently amended):   A method for production of three-dimensional bodies by successive fusing together of selected areas of a powder bed, which parts correspond to successive cross sections of the three-dimensional body, the method comprising:

applying powder layers to a work table, ~~and~~

alternately supplying energy from one radiation gun, according to an operating scheme determined for the powder layer, between two or more geometrically separate positions of ~~to~~ said selected area by moving a focal point of the radiation gun between said geometrically separate positions, where said supplying includes

forming a cross section of said three-dimensional body by fusing together the powder in said area, such that said moving a focal point creates two or more fusion zones that propagate simultaneously through the selected area during said forming.

Claim 2 (Cancelled)

Claim 3 (Currently amended):   The method as claimed in ~~claim 2~~claim 1, ~~the method further~~said alternately supplying energy including ~~propagating the focal points~~alternately supplying energy at said fusion zones at a speed which corresponds to a wave propagation speed of the fusion zone.

Claim 4 (Previously presented):   The method as claimed in claim 3, the method further including estimating said wave propagation speed from information provided by measuring the temperature distribution of a surface layer of said selected area.

Claim 5 (Currently amended):   The method as claimed in claim 3, the method further including estimating said wave propagation speed by calculating an energy balance for an area

comprising said ~~focal points~~ geometrically separate positions, said wave propagation speed being obtained from a model of a thermal conductivity equation set up for said area.

Claim 6 (Previously presented): The method as claimed in claim 1, the method further including calculating an energy balance for at least one part area within each powder layer, said calculating including determining whether energy radiated into the part area is sufficient to maintain a defined working temperature of the part area.

Claim 7 (Previously presented): The method as claimed in claim 6, said supplying energy including supplying, in addition to energy for fusing together the part area, energy for heating the part area to a defined working temperature if the result of the energy balance calculation is that there is not sufficient energy for maintaining the part area at the defined working temperature.

Claim 8 (Cancelled)

Claim 9 (Previously presented, Withdrawn with traverse): An arrangement for producing a three-dimensional product, the arrangement comprising:

a work table where said three-dimensional product is built up,

a powder dispenser which forms a powder bed by distributing a thin layer of powder on the work table,

a radiation gun that supplies energy to the powder

a beam guide that guides a beam emitted by the radiation gun such that said beam forms a cross section of said three-dimensional product by successively fusing together selected areas of said powder bed, and

a control computer which

stores information about successive cross sections of the three-dimensional product, and

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controls said beam guide according to an operating scheme forming a cross
section of said three-dimensional body,

where said operating scheme guides the beam to two or more fusion zones of said
selected area, the fusion zones propagating simultaneously through the selected area
during formation of said cross section .

Claim 10 (Currently amended, Withdrawn with traverse): The arrangement as claimed in
claim 9, where the operating scheme guides the <u>radiation gun such that a focal point of the
emitted</u> beam t<del>o two or more fusion zones while time sampling takes place, thereby supplying
alternately supplies</del> energy t~~o~~ <u>between</u> two <u>or more</u> geometrically separate ~~focal points~~<u>positions
of said area, thereby creating said simultaneously propagating fusion zones.</u>

Claim 11 (Currently amended, Withdrawn with traverse): The arrangement as claimed in
claim 10, where the operating scheme guides the focal ~~points~~ <u>point</u> of the <u>emitted</u> beam at said
fusion zones at a propagation speed which corresponds to a wave propagation speed of the fusion
zone.

Claim 12 (Previously presented, Withdrawn with traverse): The arrangement as claimed
in claim 11, where the control computer estimates said wave propagation speed from information
provided by measuring the temperature distribution of a surface layer of said selected area.

Claim 13 (Currently amended, Withdrawn with traverse): The arrangement as claimed in
claim 11, where the control computer estimates said wave propagation speed by calculating an
energy balance for an area comprising said ~~focal points~~<u>geometrically separate positions</u>, said
wave propagation speed being obtained from a model of a thermal conductivity equation set up
for said area.

Claim 14 (Previously presented, Withdrawn with traverse): The arrangement as claimed
in claim 10, where the control computer calculates an energy balance for at least one part area

within each powder layer, and determines, in the calculation, whether energy radiated into the part area is sufficient to maintain a defined working temperature of the part area.

Claim 15 (Previously presented, Withdrawn with traverse): The arrangement as claimed in claim 14, the control computer controls said beam guide such that, in addition to supplying energy for fusing together powder layers, said radiation gun supplies energy for heating the part area to a defined working temperature if the result of the energy balance calculation is that the operating scheme provides insufficient energy for maintaining f the part area at the defined working temperature.

Claim 16 (Cancelled)

Claim 17 (Previously presented, Withdrawn with traverse): The arrangement as claimed in claim 9, the arrangement further comprising a surface layer temperature distribution sensor that senses the temperature distribution of a surface layer of said selected area.